



032905-010.ST25

SEQUENCE LISTING

<110> Hazen, Kevin C.
Singleton, David R.
Masuoka, James
Wu, Jean G.
Glee, Pati M.

<120> Yeast Cell Wall Peptides and Antibodies Thereto

<130> 032905-010

<140> US 09/913,850

<141> 2001-08-20

<150> PCT/US00/04228

<151> 2000-02-18

<150> US 60/120,764

<151> 1999-02-19

<150> US 60/120,765

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cells' ability to bond to host tissues

<221> PEPTIDE

<222> 2

<223> Xaa = a bond or any amino acid

<221> PEPTIDE

<222> 3

<223> Xaa = any amino acid

<221> PEPTIDE

<222> 4

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is Val, Leu, Ile, Phe, Tyr, or Trp

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 Ile Glu Ala Arg Val Glu Ile Asp Trp Ser Leu Asp
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Gly Arg Asn Leu Glu Val Asp Arg Ala Leu Asp Thr
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Arg Ser Met Leu Glu Leu Asp Val Ile Leu Glu Gly
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<223> Clone 1 of panned 5D8 antigen epitope

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<223> Clone 12 of panned 5D8 antigen epitope

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1 5

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1 5

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<400> 28

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| 1 | | | | 5 | | | | | 10 | | |

<210> 29

<211> 14

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<400> 29

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| Leu | Val | Gln | Pro | Ala | Val | Gln | Asn | Asp | Ser | Asp | Pro | Asn | Arg |
| 1 | | | | 5 | | | | | 10 | | | | |

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<220>

<223> Mass-spec identified peptides

<400> 30

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|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Asn | Ser | Ala | Leu | Asp | Gly | Gln | Gly | Asn | Leu | Val | Ile | Thr | Ala | Arg |
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<210> 31

<211> 15

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<223> Mass-spec identified peptides

<400> 31

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| Asp | Leu | Gln | Ala | Pro | Asn | Asp | His | Val | Val | Gly | Pro | Ile | Ala | Arg |
| 1 | | | | 5 | | | | | 10 | | | | 15 | |

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| 1 | | | | 5 | | | | | 10 | | | | | 15 | |

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 Phe Tyr Gln Asp Ala Arg
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 yeast cell wall proteins to interfere with yeast
 cells' ability to bond to host tissues

<221> PEPTIDE
 <222> 2
 <223> Xaa = a peptide bond

<400> 34
 Glx Xaa Pro Leu Tyr Ile
 1 5

<210> 35
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 domains exhibited on the surface of hydrophobic
 yeast cell wall proteins to interfere with yeast
 cells' ability to bond to host tissues

<221> PEPTIDE
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 <223> Xaa = a peptide bond

<400> 35
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 1 5

<210> 36
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<223> peptides analagous in structure to the bonding domains exhibited on the surface of hydrophobic yeast cell wall proteins to interfere with yeast cells' ability to bond to host tissues

<221> PEPTIDE

<222> 2

<223> Xaa = a peptide bond

<400> 36

Glx Xaa Pro Leu Phe Ile

1

5

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<211> 6

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<223> peptides analagous in structure to the bonding domains exhibited on the surface of hydrophobic yeast cell wall proteins to interfere with yeast cells' ability to bond to host tissues

<221> PEPTIDE

<222> 2

<223> Xaa = a peptide bond

<400> 37

Glx Xaa Pro Leu Phe Val

1

5

<210> 38

<211> 6

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<223> peptides analagous in structure to the bonding domains exhibited on the surface of hydrophobic yeast cell wall proteins to interfere with yeast cells' ability to bond to host tissues

<221> PEPTIDE

<222> 2

<223> Xaa = an amino acid selected from the group consisting of Pro, Lys, Glu

<221> PEPTIDE

<222> 4

<223> Xaa = an amino acid selected from the group consisting of Phe and Tyr

<221> PEPTIDE

<222> 5

<223> Xaa = an amino acid selected from the group
consisting of Ile and Val

<221> PEPTIDE

<222> 6

<223> Xaa = an amino acid selected from the group
consisting of Ser and Thr

<400> 38

Glu Xaa Leu Xaa Xaa Xaa

1

5

<210> 39

<211> 1301

<212> DNA

<213> Artificial Sequence

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<223> DNA sequence of 6C5 antigen and deduced amino acid
sequence

<221> CDS

<222> (151)...(1182)

<400> 39

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aatctctcat caattgaagg atagttccaa atttcatcat taaaaacaac taaaataaac 120
tacaacttaa ctttaactaa aaaaaaaaaac atg tca atc gat aaa tca aga atg 174
                                Met Ser Ile Asp Lys Ser Arg Met
                                1                                5

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gtc acc aga tta ggt aaa tct ggt ttg aag gtc aac act gtt gct gtc 222
Val Thr Arg Leu Gly Lys Ser Gly Leu Lys Val Asn Thr Val Ala Val
    10                                15                                20

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```

ggt act atg aga ttg gga tcc agt tgg aga ggt ttt aat ggt gac atc 270
Gly Thr Met Arg Leu Gly Ser Ser Trp Arg Gly Phe Asn Gly Asp Ile
    25                                30                                35                                40

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gac gag tgt ttg aaa att ttg aaa ttt tgt tat gac aac ggg ttc cgt 318
Asp Glu Cys Leu Lys Ile Leu Lys Phe Cys Tyr Asp Asn Gly Phe Arg
    45                                50                                55

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act ttc gat act gct gat act tac tca aat ggt aaa tct gaa gag ttg 366
Thr Phe Asp Thr Ala Asp Thr Tyr Ser Asn Gly Lys Ser Glu Glu Leu
    60                                65                                70

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ttg ggt tta ttc atc aag aaa tac aat att cca cgt gaa cga att gtc 414
Leu Gly Leu Phe Ile Lys Lys Tyr Asn Ile Pro Arg Glu Arg Ile Val
    75                                80                                85

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att tta acc aaa tgc tac ttc tca gtc aaa gac gac gca gaa gac agt 462
Ile Leu Thr Lys Cys Tyr Phe Ser Val Lys Asp Asp Ala Glu Asp Ser
    90                                95                                100

```

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tca ctt gaa att gat cca att gac tat atg aac ggt aaa gga ttg agc 510

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| | | | | | | | | | | | | | | | | | |
|------------|-----|-----|-----|-----|------------|-----|-----|-----|-----|------------|-----|-----|-----|-----|------------|------|--|
| Ser 105 | Leu | Glu | Ile | Asp | Pro 110 | Ile | Asp | Tyr | Met | Asn 115 | Gly | Lys | Gly | Leu | Ser 120 | | |
| aga | aag | cat | atc | tta | gcc | gca | gct | gaa | gct | tcc | gtt | aaa | cgt | ttg | gga | 558 | |
| Arg | Lys | His | Ile | Leu | Ala | Ala | Ala | Glu | Ala | Ser | Val | Lys | Arg | Leu | Gly | | |
| | | | | 125 | | | | 130 | | | | | | 135 | | | |
| aca | tat | att | gat | gtg | ttg | caa | att | cat | cgt | tta | gac | cat | gaa | gtc | aca | 606 | |
| Thr | Tyr | Ile | Asp | Val | Leu | Gln | Ile | His | Arg | Leu | Asp | His | Glu | Val | Thr | | |
| | | | 140 | | | | | 145 | | | | | 150 | | | | |
| tat | gaa | gag | gtt | atg | cgt | tct | tta | aat | gat | gtt | gtt | gaa | caa | gga | ttg | 654 | |
| Tyr | Glu | Glu | Val | Met | Arg | Ser | Leu | Asn | Asp | Val | Val | Glu | Gln | Gly | Leu | | |
| | | | 155 | | | | 160 | | | | | 165 | | | | | |
| gca | aga | tac | att | ggg | gcc | tca | tct | atg | aaa | aca | tgg | gaa | ttt | gtt | gag | 702 | |
| Ala | Arg | Tyr | Ile | Gly | Ala | Ser | Ser | Met | Lys | Thr | Trp | Glu | Phe | Val | Glu | | |
| | 170 | | | | | 175 | | | | | 180 | | | | | | |
| ttg | caa | aat | gtt | gct | aaa | gca | aat | ggg | tgg | cac | caa | ttc | atc | tcc | atg | 750 | |
| Leu | Gln | Asn | Val | Ala | Lys | Ala | Asn | Gly | Trp | His | Gln | Phe | Ile | Ser | Met | | |
| 185 | | | | | 190 | | | | 195 | | | | | | 200 | | |
| caa | agt | cac | tat | tct | tta | ttg | tac | cgt | gag | gac | gag | aga | gaa | ttg | aat | 798 | |
| Gln | Ser | His | Tyr | Ser | Leu | Leu | Tyr | Arg | Glu | Asp | Glu | Arg | Glu | Leu | Asn | | |
| | | | | 205 | | | | 210 | | | | | | 215 | | | |
| gac | tat | tgt | aag | aag | aat | ggg | att | gga | tta | atc | cct | tgg | tct | cca | aac | 846 | |
| Asp | Tyr | Cys | Lys | Lys | Asn | Gly | Ile | Gly | Leu | Ile | Pro | Trp | Ser | Pro | Asn | | |
| | | | 220 | | | | | 225 | | | | | 230 | | | | |
| ggg | ggg | ggg | gtt | ttg | tgt | cgt | cca | ttc | gac | tct | gaa | aaa | act | aag | cag | 894 | |
| Gly | Gly | Gly | Val | Leu | Cys | Arg | Pro | Phe | Asp | Ser | Glu | Lys | Thr | Lys | Gln | | |
| | | | 235 | | | | 240 | | | | | 245 | | | | | |
| ttc | tta | gac | aac | aag | caa | tgg | tca | agt | tta | ttt | gga | tta | gaa | aat | gtc | 942 | |
| Phe | Leu | Asp | Asn | Lys | Gln | Trp | Ser | Ser | Leu | Phe | Gly | Leu | Glu | Asn | Val | | |
| | 250 | | | | | 255 | | | | | 260 | | | | | | |
| aga | gac | gca | gat | aag | att | atc | gtc | gat | aga | gtt | gaa | gag | ttg | agt | gtt | 990 | |
| Arg | Asp | Ala | Asp | Lys | Ile | Ile | Val | Asp | Arg | Val | Glu | Glu | Leu | Ser | Val | | |
| 265 | | | | | 270 | | | | 275 | | | | | | 280 | | |
| aaa | tac | aat | gca | tct | atg | atg | caa | gtt | tca | ttg | gca | tgg | tgt | att | gct | 1038 | |
| Lys | Tyr | Asn | Ala | Ser | Met | Met | Gln | Val | Ser | Leu | Ala | Trp | Cys | Ile | Ala | | |
| | | | | 285 | | | | 290 | | | | | | 295 | | | |
| aaa | ggg | gtg | att | cca | att | gcc | ggg | gtc | tcc | aaa | ttt | gag | caa | gct | gaa | 1086 | |
| Lys | Gly | Val | Ile | Pro | Ile | Ala | Gly | Val | Ser | Lys | Phe | Glu | Gln | Ala | Glu | | |
| | | | 300 | | | | 305 | | | | | | 310 | | | | |
| gaa | ttg | gtt | ggg | att | ttc | aaa | gtc | aac | tta | act | gaa | gat | gat | atc | aaa | 1134 | |
| Glu | Leu | Val | Gly | Ile | Phe | Lys | Val | Asn | Leu | Thr | Glu | Asp | Asp | Ile | Lys | | |
| | | | 315 | | | | 320 | | | | | 325 | | | | | |
| tat | ctt | gaa | gag | cca | tat | cac | gcc | aaa | gac | ttg | gca | aga | gtt | gct | gct | 1182 | |
| Tyr | Leu | Glu | Glu | Pro | Tyr | His | Ala | Lys | Asp | Leu | Ala | Arg | Val | Ala | Ala | | |
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